
DRAFT

**TRANSPORTATION AIR QUALITY
CONFORMITY ANALYSIS**
FOR
2004 Regional Transportation Improvement Program Amendment 04-27

July 6, 2006



CONFORMITY ANALYSIS

Introduction

The Regional Transportation Improvement Program (RTIP) is the federally required short-range document that implements the long-range Regional Transportation Plan (RTP). The biennial RTIP update is produced on an even year cycle. In the most recent cycle, the 2004 RTIP was developed in tandem with the 2004 RTP. This RTIP cycle is consistent with the State Transportation Improvement Program (STIP) cycle. The 2004 STIP in the Southern California Association of Governments (SCAG) region was incorporated into the 2004 RTIP for conformity analysis. The Federal Highways Administration (FHWA) and Federal Transit Administration (FTA) approved the 2004 RTIP on October 4, 2004.

Project Description

Amendment 04-27 includes two non-exempt projects (project IDs: ORA020111 and Caltrans 5620). Both are located within the South Coast Air Basin (SCAB); therefore this conformity determination is being made for the SCAB. Amendment 04-27 relies on the regional emissions analysis for the 2004 RTP and RTIP, as amended.

Federal Requirements

Federal and state regulations allow that SCAG, as the designated Metropolitan Planning Organization (MPO), may rely on a previous regional emissions analysis when processing amendments, in the event that certain conditions are met. Section 93.122(g) is the relevant part of the Transportation Conformity rule for this amendment.

Conformity Status of Current RTIP and RTP

On June 7, 2004, the federal conformity determination for the 2004 RTP was issued for the following non-attainment and maintenance areas:

- South Coast Air Basin (SCAB – Ozone, CO, NO₂, and PM₁₀)
- San Bernardino County portion of the Mojave Desert Air Basin (MDAB – PM₁₀)
- Coachella Valley portion of the Salton Sea Air Basin (SSAB - PM₁₀)
- Imperial County portion of SSAB (Ozone and PM₁₀)

The federal conformity determination for the Ventura County portion of the South Central Coast Air Basin (ozone) and the Southeast Desert Modified ozone area was issued by the federal agencies on June 16, 2004. The effective date for the conformity determination for the entire SCAG 2004 RTP, including all of the air basins is June 7, 2004.

On October 4, 2004, the federal agencies approved funding and determined conformity of the 2004 RTIP. The federal funding approval of the 2004 RTIP will expire on October 4, 2006. The 2004 RTIP is based on the 2004 RTP and implements the projects and programs included in the fiscal years (2004/05 – 2009/2010) of the 2004 RTP.

On May 12, 2005 a federal conformity determination was issued for the 2004 RTP and RTIP for those areas designated as non attainment under the 8-hour Ozone standard.

On March 30, 2006 a federal conformity determination for the 2004 RTP was issued for the South Coast Air Basin, which is designated as non attainment for PM_{2.5}.



Summary of the 2004 RTP Regional Emissions Analyses

The projects in Amendment 04-27 are from the 2004 RTP, which is a conforming Plan. Amendment 04-27 does not include any new regionally significant projects beyond those currently included in the 2004 RTP, nor does it move a project from any modeling horizon year currently assumed in the 2004 RTP. Furthermore, the design, concept and scope of the project do not differ significantly from what was described in the 2004 RTP. Allocating funds to these projects will not delay the implementation of projects in the 2004 RTP or RTIP.

As such, SCAG is using the conformity analysis for the 2004 RTP (as amended February 2, 2006) and 2004 RTIP, as amended (through Amendment 04-23). The regional emissions analysis methodology for this amendment to the 2004 RTIP uses two sets of calculations. For pollutants with emissions budgets, the currently applicable budget is used to determine conformity. Only one pollutant in the SCAB (PM_{2.5}) does not currently have a budget. Until the budget is established, the less than base year test is used for analysis. For all other pollutants, the budgets remain the same as described in the 2004 RTP and RTIP.

Reaffirmation of 2004 RTP/RTIP Conformity Tests

SCAG reaffirms the applicable conformity findings for both the 2004 RTP/RTIP, which can be found at:

<http://www.scag.ca.gov/rtp2001/2004draft/techappendix/FinalTechAppend.htm>

and:

<http://www.scag.ca.gov/RTIP/final04/Sec1.pdf>.

This reaffirmation covers the findings for all applicable pollutants, including regional emissions analyses, financial constraint test, timely implementation of Transportation Control Measures (TCMs), applying the use of the latest planning assumptions and the latest approved emissions model (EMFAC2002), reaffirming consistency between the adopted 2004 RTIP and the adopted 2004 RTP, and reaffirming the process for interagency consultation and public participation.

The regional emissions analysis for the amendment was performed with the SCAG Regional Transportation Model used for the 2004 RTP and RTIP and utilizes the planning, socioeconomic and model assumptions from the 2004 RTP and RTIP. A summary of the regional emissions analysis (conformity finding) is tabulated below.

Conformity Findings

SCAG has completed its analysis of the proposed changes to the 2004 RTIP. SCAG's findings for the approval of this amendment are as follows:

Overall

Statement of Fact: Inclusion of this amendment in the 2004 RTIP would not change any other policies, programs and projects which were previously approved by the federal agencies on October 4, 2004.



Finding: SCAG has determined that the 2004 RTIP Amendment 04-26 is consistent with all federal and state requirements and complies with the federal conformity regulations.

Regional Emissions Analysis – South Coast Air Basin (SCAB)

Finding: The 2004 RTIP Amendment 04-27 regional emissions for Ozone precursors (NO_x, ROG/VOC) are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years (2003 SIP)

Finding: The 2004 RTIP Amendment 04-27 regional emissions for CO are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years (2003 SIP).

Finding: The 2004 RTIP Amendment 04-27 regional emissions for NO₂ are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years (2003 SIP).

Finding: The 2004 RTIP Amendment 04-27 regional emissions for PM₁₀ (particulate matter less than 10 microns in size) precursors are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years (2003 SIP).

Finding: The 2004 RTIP Amendment 04-27 regional emissions for direct PM_{2.5} and NO_x are less than the baseline year (2002) for the 24-hour and the annual standard in the SCAB.

Timely Implementation of TCMs

Only two non attainment areas in the SCAG region currently have TCMs, the Ventura County portion of the South Central Coast Air Basin and the SCAB. In the SCAB, the list of TCMs and the Timely Implementation Report used to track implementation of TCMs is comprehensively updated with each RTIP cycle. The most recent list of TCMs can be found in the 2004 RTIP.

Finding: The 2004 RTIP Amendment 04-27 does not change funding and timely implementation of SCAB TCM projects. All SCAB TCM projects in the federally approved conforming 2004 RTIP are given funding priority and are on schedule for implementation.

Fiscal Constraint Analysis

Finding: Amendment 04-27 includes the most recent financial plan for the 2004 RTIP. All projects listed in the 2004 RTIP (including the proposed amendment) are financially constrained for all fiscal years.

Interagency Consultation and Public Involvement Analysis

Finding: The prior regional conformity analysis leading to FHWA and FTA's approval on October 4, 2004 underwent extensive agency and public consultation as documents in Section V of Technical Appendix II of the 2004 RTIP. For RTIP Amendment 04-27 SCAG will undergo additional public involvement including solicitation via email for comments from the Transportation Conformity Working Group. In addition, Amendment 04-27 will be posted on SCAG's website (www.scag.ca.gov) for a 30-day public comment period.



Regional Emissions Analysis – South Coast Air Basin (SCAB)

The South Coast Air Basin (SCAB) covers the urbanized portions of Los Angeles, Orange, Riverside, and San Bernardino counties, and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD).¹

OZONE – SUMMER (8HR)

<u>ROG</u>	<u>YR 2005</u>	<u>YR 2008</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP	258.467	212.754	151.290	107.240	73.177
BUDGET	263.000	216.000	155.000	155.000	155.000
<u>NOx</u>	<u>YR 2005</u>	<u>YR 2008</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP	542.271	453.459	349.265	184.272	120.849
BUDGET	546.000	464.000	352.000	352.000	352.000

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than budget

CARBON MONOXIDE (CO) - WINTER

<u>CO</u>	<u>YR 2005</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP	2,597.739	1,809.416	859.798	530.093
BUDGET	3,361.000	3,361.000	3,361.000	3,361.000

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than budget

NITROGEN DIOXIDE (NO2) - WINTER

<u>NOx</u>	<u>YR 2005</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP	613.664	448.797	205.622	133.010
BUDGET	686.000	686.000	686.000	686.000

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than budget

¹ The emissions analysis provided is based on the 2004 RTP as amended on February 2, 2006.



PARTICULATE MATTER LESS THAN 10 MICRONS (PM10) - ANNUAL AVERAGE

	<u>YR 2006</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
<u>ROG</u>				
Amended 2004 RTP/RTIP	245.350	189.004	106.453	72.524
BUDGET	251.000	251.000	251.000	251.000

NOx

Amended 2004 RTP/RTIP	534.144	417.986	192.743	125.758
BUDGET	549.000	549.000	549.000	549.000

PM10

Amended 2004 RTP/RTIP	165.927	163.365	161.520	163.913
BUDGET	166.000	166.000	166.000	166.000

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than budget

DIRECT PM2.5 EMISSIONS - 24-Hour

	<u>YR 2002</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP				
Exhaust	10.48	9.49	8.83	9.20
Tire Wear	0.83	0.90	0.98	1.08
Brake Wear	1.97	2.10	2.25	2.44
Total PM2.5 Exhaust	13.27	12.49	12.06	12.72
Base Year Emissions	13.27	13.27	13.27	13.27
Difference from Base Year	0.00	-0.78	-1.21	-0.55

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than base year

DIRECT PM2.5 EMISSIONS - Annual

	<u>YR 2002</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP				
Exhaust	3,825	3,464	3,223	3,358
Tire Wear	303	329	358	394
Brake Wear	719	767	821	891
Total PM2.5 Exhaust	4,844	4,559	4,402	4,643
Base Year Emissions	4,844	4,844	4,844	4,844
Difference from Base Year	0.00	-285	-442	-201

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than base year



OXIDES OF NITROGEN (NO_x) - 24-Hour

	<u>YR 2002</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP	715.34	417.99	192.74	125.75
Base Year Emissions	715.34	715.34	715.34	715.34
Difference from Base Year	0.00	-297.35	-522.60	-589.59

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than base year

OXIDES OF NITROGEN (NO_x) - Annual

	<u>YR 2002</u>	<u>YR 2010</u>	<u>YR 2020</u>	<u>YR 2030</u>
Amended 2004 RTP/RTIP	261,099	152,565	70,351	45,898
Base Year Emissions	261,099	261,099	261,099	261,099
Difference from Base Year	0	-108,534	-190,748	-215,201

Conformity finding requirement: RTP/RTIP emissions must be equal to or less than base year